

AMENDMENTS

In the Claims

Current Status of Claims

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100.(currently amended) A flexible laminate comprising a monofilm-formed or multifilm-formed flexible ply A, and ~~another~~ a monofilm-formed or multifilm-formed flexible ply B, both comprising orientable thermoplastic polymer materials, in which the ply A has a fluted configuration and the ply B on a first side is adhesively bonded in bonding zones to crests on a first side of the ply A,

where:

- (a) the ply B also has a fluted configuration, a flute direction of the ply B forms an angle from about 30° up to and including 90° to a flute direction of the ply A and the bonding zones being on crests of the first side of the ply B to produce spot bonds with the crests on the first side of the ply A,
- (b) the adhesive bonding is
 - (i) directly between the ply A to the ply B and established through a lamination layer on the ply A and/or the ply B;
 - (ii) established through a separate thin bonding film; or
 - (iii) through a fibrous web adapted for bonding, and
- (c) wavelengths of the flutes in the ply A and/or the ply B are no longer than 5 mm, and the wavelengths of the flutes in both the ply A and the ply B are less than 10 mm, and

(d) the bonding forms channels by the flutes in the ply A and the ply B, at least some of the channels filled with a filling material, where the material is a preservative for goods intended to become packed in or protected by the laminate, and where the preservative is selected from the group consisting of an oxygen scavenger, ethylene scavenger, and a biocide.

101.(previously presented) The laminate according to claim 100, wherein either a thickness of each of the plies is substantially the same in the bonding zones and non-bonding zones, or at least one of the plies exhibits first zones extending parallel to the flute direction, each bonding zone being substantially located within a the first attenuated zones whereby each first attenuated zone is understood as delimited by the positions where the thickness is an average between a minimum thickness of this ply within the first attenuated zones and a ply's maximum thickness within adjacent non-bonding zones.

102.(previously presented) The laminate according to claim 100, wherein the flute wavelength in each of the two plies is no more than 4 mm.

103.(previously presented) The laminate according to claim 100, wherein each of the two plies a curved length of a flute is on average at least 5% longer than the linear wavelength, the curved length being understood as the length of a curve through a cross section of a full flute wave including the bonding zone which curve lies in the middle between the two surfaces of the ply.

104.(canceled)

105.(previously presented) The laminate according to claim 103, wherein a width of each bonding zone in at least one of the two plies is no less than 15% of the flute wavelength.

106.(previously presented) The laminate according to claim 100, wherein the flutes in at least one of the two plies are evenly formed and extend in a substantially rectilinear shape.

1 121.(previously presented) The laminate according to claim 101, wherein the first attenuated
2 zones are present in at least one of the plies and in which the bonding zones are substantially
3 coincident with the first attenuated zones.

1 122.(previously presented) The laminate according to claim 101, wherein the first attenuated
2 zones are present at least in one of the two plies and characterized by second solid-state-attenuated
3 zones between each pair of adjacent first attenuated zones, the second attenuated zones being
4 narrower than the first attenuated zones and located on non-bonded crests of the respective ply.

1 123.(previously presented) The laminate according to claim 101, wherein at least one of the two
2 plies exhibits solid-state-attenuated zones wherein the first attenuated zones of the ply are attenuated
3 so that the minimum thickness in such zone is less than 75% of the maximum thickness of the ply
4 in the non-bonded zones.

1 124.(previously presented) The laminate according to claim 100, wherein the ply A and the ply
2 B comprise a material which is orientable at room temperature.

1 125.(previously presented) The laminate according to claim 100, wherein the spot bonds between
2 the plies A and B is effected through a lower melting surface layer on at least one of the plies,
3 formed in a coextrusion process.

1 126.(previously presented) The laminate according to claim 100, wherein at least one of the plies
2 comprises a barrier film designed for protection against oxygen or other gaseous materials.

1 127.(previously presented) The laminate according to claim 100, wherein at least some of the
2 flutes in one or both plies are flattened at intervals and bonded across each ones entire width at the
3 flattened locations to make two arrays of flutes to form closed pockets.

1 128.(previously presented) The laminate according to claim 127, wherein the flattened portions

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1 199.(previously presented) The laminate according to claim 102, wherein the flute wavelength
2 in each of the two plies is no more than 3 mm.

1 200.(previously presented) The laminate according to claim 102, wherein the flute wavelength
2 in each of the two plies is no more than 2 mm.

1 201.(previously presented) The laminate according to claim 103, wherein each of the two plies
2 the curved length of a flute is on average at least 10% longer than the linear wavelength.

1 202.(previously presented) The laminate according to claim 105, wherein the width of each
2 bonding zone in at least one of the two plies is no less than 20% of the flute wavelength.

1 203.(previously presented) The laminate according to claim 105, wherein the width of each
2 bonding zone in at least one of the two plies is no less than 30% of the flute wavelength.

1 204.(**currently amended**) The laminate according to claim 114, wherein the yield tension in the
2 ply A in a direction parallel to its flute direction and/or the yield tension in the ply B in a direction
3 parallel to its flute direction, both referring to the cross-section of the respective ply and determined
4 in non-bonded narrow strips at an extension velocity of 500%min⁻¹, is no less than 50 MPa and still
5 more preferably no less than 75 MPa.

1 205.(previously presented) The laminate according to claim 114, wherein the yield tension in the

2 ply A in a direction parallel to its flute direction and/or the yield tension in the ply B in a direction
3 parallel to its flute direction, both referring to the cross-section of the respective ply and determined
4 in non-bonded narrow strips at an extension velocity of $500\% \text{min}^{-1}$, is no less than 75 MPa.

1 206.(previously presented) The laminate according to claim 116, wherein the ply B comprises a
2 thermoplastic elastomer.

1 207.(previously presented) The laminate according to claim 120, wherein the total width of the
2 extensions leaves no less than 70% of the width of the non-bonding zone as not belonging to any
3 first attenuated zone.

1 208.(previously presented) The laminate according to claim 122, wherein the first attenuated
2 zones of the ply are attenuated so that the minimum thickness in such zone is less than 50% of that
3 maximum thickness.

1 209.(previously presented) The laminate according to claim 122, wherein the first attenuated
2 zones of the ply are attenuated so that the minimum thickness in such zone is less than 30% of that
3 maximum thickness.

1 210.(previously presented) The laminate according to claim 123, wherein the ply A and the ply
2 B comprise a polyolefin.

1 211.(currently amended) The laminate according of claim 129, wherein the average over the
2 non-bonding zone is no less than 1000 MPa.

212.(canceled)

1 213.(currently amended) The laminate according to claim ~~13~~100, wherein the laminate further
2 includes micro-perforations established in the flutes, which enhance the effect of the preservative.

1 214.(new) The laminate according to claim 114, wherein the yield tension in the ply A in a

